

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|---|-------------|----------------------|-------------------------|-----------------|
| 09/936,638 | 12/12/2002 | Helmut Fennel | 10543-032 | 8722 |
| 7590 04/27/2004 | | | EXAMINER | |
| Steven L Oberholtzer | | | JACKSON, ANDRE K | |
| Brinks Hofer Gilson & Lione PO Box 10395 | | | ART UNIT | PAPER NUMBER |
| Chicago, IL 60610 | | | 2856 | |
| | | | DATE MAILED: 04/27/200- | 4 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | 14 | | | | | |
|---|---|---|--|--|--|--|
| | Application No. | Applicant(s) | | | | |
| | 09/936,638 | FENNEL ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | André K. Jackson | 2856 | | | | |
| The MAILING DATE of this communication Period for Reply | n appears on the cover sheet | with the correspondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR R THE MAILING DATE OF THIS COMMUNICATIV - Extensions of time may be available under the provisions of 37 Cl after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b). | ON. FR 1.136(a). In no event, however, may n. a reply within the statutory minimum of t eriod will apply and will expire SIX (6) M statute, cause the application to become | a reply be timely filed hirty (30) days will be considered timely. ONTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on | Responsive to communication(s) filed on 20 January 2004. | | | | | |
| 2a) This action is FINAL . 2b) ⊠ | ☐ This action is FINAL . 2b) ☐ This action is non-final. | | | | | |
| 3) ☐ Since this application is in condition for all |)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice un | der <i>Ex parte Quayl</i> e, 1935 C | .D. 11, 453 O.G. 213. | | | | |
| Disposition of Claims | , | | | | | |
| 4) Claim(s) 1-7 is/are pending in the applicat | ion. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5)⊠ Claim(s) <u>6 and 7</u> is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1 and 3-5</u> is/are rejected. | | | | | | |
| 7) Claim(s) 2 is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction a | ind/or election requirement. | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Exa | miner. | | | | | |
| 10) The drawing(s) filed on is/are: a) | accepted or b) objected | to by the Examiner. | | | | |
| Applicant may not request that any objection to | the drawing(s) be held in abey | ance. See 37 CFR 1.85(a). | | | | |
| Replacement drawing sheet(s) including the o | orrection is required if the drawi | ng(s) is objected to. See 37 CFR 1.121(d). | | | | |
| 11)☐ The oath or declaration is objected to by the | ne Examiner. Note the attach | ned Office Action or form PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for fo | reign priority under 35 U.S.C | . § 119(a)-(d) or (f). | | | | |
| a)☐ All b)☐ Some * c)☐ None of: | | | | | | |
| Certified copies of the priority docu | | | | | | |
| Certified copies of the priority docu | | | | | | |
| 3. Copies of the certified copies of the | | en received in this National Stage | | | | |
| application from the International B | · | | | | | |
| * See the attached detailed Office action for | a list of the certified copies n | ot received. | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) | | w Summary (PTO-413) | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-94 | ~/ —— —— | lo(s)/Mail Date of Informal Patent Application (PTO-152) | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) 6) Other: | | | | | | |

Art Unit: 2856

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: switching valves. The specification has described the valves as separating valves. There was no art rejection applied to this claim pending clarification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Führer.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection

under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Führer discloses in the patent entitled "Circuit arrangement for the brake system of a motor vehicle" determining the viscosity of a brake fluid as it is affected by temperature of a vehicle brake circuit and a predetermined pressure build-up within time limits having the steps of detecting in at least one section of the brake circuit a pressure in the section and measuring at least one of a magnitude of the pressure or a time required for build up the pressure and relating the magnitude of the pressure or time to the viscosity (Abstract, Columns 2,4).

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kahl et al.

Art Unit: 2856

Regarding claim 1, Kahl et al. disclose in the patent entitled "Method and device for brake pressure adjustment" determining the viscosity of a brake fluid as it is affected by temperature of a vehicle brake circuit (Columns 1,2). It is well known that the temperature changes the viscosity of the fluid. Kahl et al. disclose that the fluid is both warm and cold from Figure 3, which shows how the viscosity is related to both the time and a predetermined pressure (Columns 1,2).

6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cornell et al. in view of Kahl et al.

Regarding claim 1, Cornell et al. disclose in the patent entitled "Duration control strategy for a hydraulically actuated engine compression release brake" determining the viscosity of a brake fluid as it is affected by temperature of a vehicle brake circuit (Column 3, lines 66-67-Column 4). Cornell et al. do not explicitly disclose a predetermined pressure build-up within time limits having the steps of detecting in at least one section of the brake circuit a pressure in the section and measuring at least one of a magnitude of the pressure or a time required for build up the pressure and relating the magnitude of the pressure or time to the viscosity. However, Kahl et al. disclose a predetermined pressure build-up within time limits having the steps of detecting in at least one section of the brake circuit a pressure in the section and measuring at least one of a magnitude of the pressure in the section and measuring at least one of a magnitude of the pressure or a time required for build up the pressure and relating the

Art Unit: 2856

magnitude of the pressure or time to the viscosity (Figure 3, Columns 1,2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cornell et al. to include a predetermined pressure build-up within time limits having the steps of detecting in at least one section of the brake circuit a pressure in the section and measuring at least one of a magnitude of the pressure or a time required for build up the pressure and relating the magnitude of the pressure or time to the viscosity. By adding this feature the artisan would be able to determine the pressure as related to the viscosity and generate the critical pressure difference across the inlet valve.

7. Claim 1,3 and 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oyama et al.

Regarding claim 1, Oyama et al. disclose in the patent entitled "Method of detecting temperature of brake fluid and method of controlling brake fluid pressure" determining the viscosity of a brake fluid as it is affected by temperature of a vehicle brake circuit (Column 4); a predetermined pressure build-up within time limits (Figures 5,6) having the steps of detecting in at least one section of the brake circuit a pressure in the section and measuring at least one of a magnitude of the pressure or a time required for build up the pressure and relating the magnitude of the pressure or time to the viscosity (Columns 3-4, Figures 5,6,9,10). Oyama

Art Unit: 2856

et al. make it clear that the viscosity is estimated and not precisely know; however, estimation is a determination relative to the subject matter.

Regarding claim 3, Oyama et al. disclose where the maximum magnitude of the pressure is determined (Figures 5, 6).

Regarding claim 4, Oyama et al. disclose where the magnitude of the pressure variation is determined as a function of time (Figures 5, 6).

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oyama et al. in view of Reinartz et al.

Regarding claim 5, Oyama et al. do not disclose where one of the magnitude or time of the pressure is determined after activation of a pump of the brake circuit delivering the brake fluid or after opening of a valve of the brake circuit. However, Reinartz et al. disclose where the magnitude or time of the pressure is determined after activation of a pump of the brake circuit delivering the brake fluid or after opening of a valve of the brake circuit (Columns 1 and 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Meier to include where the magnitude or time of the pressure is determined after activation of a pump of the brake circuit delivering the brake fluid or after opening of a valve of the brake circuit since this modification would increase the performance of the braking system.

9. Claim 2 is objected to as being dependent upon a rejected base claim.

Art Unit: 2856

10. Claim 6 and 7 are allowed.

Regarding claim 6, prior art found and relied upon did not disclose the "vehicle, wherein the input quantities which may include inputs of steering angle and vehicle reference speed which are substantially defined by a roadway driving condition are converted into the nominal value of a yaw rate quantity due to a vehicle model fixed by operands and said quantities are compared with the actual value of the yaw rate quantity of said vehicle measured by means of sensors, wherein the difference value found is sent to a control law in which a torque quantity is calculated which serves to fix pressure quantities that generate an additional yaw torque by way of wheel brakes of the vehicle to bring the measured yaw rate quantity in conformity with the calculated yaw rate quantity" in combination with the remaining limitations of the claim. In the Examiner's opinion it would not have been obvious to the skilled artisan to modify the prior art to include this limitation.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to André K. Jackson whose telephone number is (571) 272-2196. The examiner can normally be reached on Mon.-Thurs. 7AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-

Art Unit: 2856

2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 16, 2004

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2800